

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently amended) A security policy method comprising the steps of:
associating wildcarded resource identifiers with a corresponding security policy;
and
matching a resource identifier received in an access request to one of a list of said wildcarded resource identifiers, wherein said matching is determined in accordance with a predetermined set of precedence values, each precedence value of said predetermined set of precedence values corresponding to a predetermined wildcard element.
2. (Original) The method of claim 1 wherein each predetermined wildcard element comprises a regular expression element.
3. (Currently amended) The method of claim 1 further comprising the step of selecting, in response to a security policy associated with a wildcarded resource identifier from said matching step, one of a grant of access to a requested resource corresponding to said resource identifier and a denial of access to said requested resource.
4. (Original) The method of claim 1 wherein said list of said wildcarded resource identifiers comprises an ordered list of wildcarded resource identifiers, said ordered list being ordered in accordance with said predetermined set of precedence values.
5. (Currently amended) The method of claim 4 wherein said step of matching said resource identifier received in said access request comprises the steps of:
sequentially comparing said resource identifier received in said access request with each wildcarded resource identifier in said ordered list; and

in response to a comparison, terminating said comparing step, and returning a policy associated with a wildcarded resource identifier from said comparing step.

6. (Currently amended) The method of claim 4 further comprising the step of ordering ~~a list of wildcarded resource identifiers to generate~~ said ordered list of ~~ordered~~ wildcarded resource identifiers.

7. (Currently amended) The method of claim 6 wherein said step of ordering ~~[[a]]~~ said ordered list of wildcarded resource identifiers includes the steps of:

selecting a pair of wildcarded resource identifiers ~~from a list~~ in accordance with a predetermined sorting process;

sequentially selecting elements in each identifier of said pair of wildcarded resource identifiers;

comparing a first precedence value corresponding to a first one of a selected element of said pair of wildcarded resource identifiers and a second precedence value corresponding to a second one of a selected element of said pair of wildcarded resource identifiers, wherein said first precedence value and said second precedence value each comprise a predetermined value from said predetermined set of precedence values; and

if said first precedence value and said second precedence value ~~corresponding~~ are not equal, ordering said pair of wildcarded resource identifiers according to said first precedence value and said second precedence value.

8. (Currently amended) The method of claim 7 further comprising the step of returning said pair of wildcarded resource identifiers from said ordering step to said ~~preselected~~ predetermined sorting process.

9. (Currently amended) The method of claim 1 wherein said predetermined set of precedence values comprises:

a first precedence value having a highest precedence corresponding to an exact character, a second precedence value having a next lower precedence from said first precedence value, corresponding to a character range;

a third precedence value, having a next lower precedence from said second precedence value, corresponding to any character;

a fourth precedence value, having a next lower precedence from said third precedence value, corresponding to a repeating exact character;

a fifth precedence value, having a next lower precedence from said fourth precedence value, corresponding to a repeating character range; and

a sixth precedence value, having a next lower precedence from said fifth precedence value, corresponding to any character string, and wherein said sixth precedence value comprises a lowest precedence value.

10. (Currently amended) A security policy system comprising:

circuitry operable for associating wildcarded resource identifiers with a corresponding security policy; and

circuitry operable for associating wildcarded resource identifiers with a corresponding security policy matching a resource identifier received in an access request to one of a list of said wildcarded resource identifiers, wherein said matching is determined in accordance with a predetermined set of precedence values, each precedence value of said predetermined set of precedence values corresponding to a predetermined wildcard element.

11. (Original) The system of claim 10 wherein each predetermined wildcard element comprises a regular expression element.

12. (Currently amended) The system of claim 10 further comprising circuitry operable for selecting, in response to a security policy associated with a wildcarded resource identifier from said matching step, one of a grant of access to a requested resource corresponding to said resource identifier and a denial of access to said requested resource.

13. (Currently amended) The system of claim 10 wherein said list of said wildcarded resource identifiers comprises an ordered list of ~~wildcarded~~ wildcarded resource

identifiers, said ordered list being ordered in accordance with said predetermined set of precedence values.

14. (Currently amended) The system of claim 13 wherein said circuitry operable for matching said resource identifier received in said access request comprises:

circuitry operable for sequentially comparing said resource identifier received in said access request with each wildcarded resource identifier in said ordered list; and

circuitry operable for, in response to a comparison, terminating said comparing step, and returning a policy associated with a wildcarded resource identifier from said comparing step.

15. (Currently amended) The system of claim 13 further comprising circuitry operable for ~~ordering a list of wildcarded resource identifiers to generate said ordered list~~ of ~~ordered~~ wildcarded resource identifiers.

16. (Currently amended) The system of claim 15 wherein said circuitry operable for step of ordering ~~[[a]]~~ said ordered list of wildcarded resource identifiers includes:

circuitry operable for selecting a pair of wildcarded resource identifiers from a list in accordance with a predetermined sorting process;

circuitry operable for sequentially selecting elements in each identifier of said pair of wildcarded resource identifiers;

circuitry operable for comparing a first precedence value corresponding to a first one of a selected element of said pair of wildcarded resource identifiers and a second precedence value corresponding to a second one of a selected element of said pair of wildcarded resource identifiers, wherein said first precedence value and said second precedence value each comprise a predetermined value from said predetermined set of precedence values; and

circuitry operable for, if said first precedence value and said second precedence value ~~corresponding~~ are not equal, ordering said pair of wildcarded resource identifiers according to said first precedence value and said second precedence value.

17. (Currently amended) The system of claim 16 further comprising ~~the circuitry~~ circuitry operable for returning said pair of wildcarded resource identifiers from said ordering step to said ~~preselected~~ predetermined sorting process.

18. (Currently amended) The system of claim 10 wherein said predetermined set of precedence values comprises:

a first precedence value having a highest precedence corresponding to an exact character, a second precedence value have a next lower precedence from said first precedence value, corresponding to a character range;

a third precedence value, having a next lower precedence from said second precedence value, corresponding to any character;

a fourth precedence value, having a next lower precedence from said third precedence value, corresponding to a repeating exact character;

a fifth precedence value, having a next lower precedence from said fourth precedence value, corresponding to a repeating character range; and

a sixth precedence value, having a next lower precedence from said fifth precedence value, corresponding to any character string, and wherein said sixth precedence value comprises a lowest precedence value.

19. (Currently amended) A computer program product in a machine readable medium of expression including programming for wildcarding security policies comprising programming instructions for performing the steps of:

associating wildcarded resource identifiers with a corresponding security policy;
and

matching a resource identifier received in an access request to one of a list of said wildcarded resource identifiers, wherein said matching is determined in accordance with a predetermined set of precedence values, each precedence value of said predetermined set of precedence values corresponding to a predetermined wildcard element.

20. (Original) The program product of claim 19 wherein each predetermined wildcard element comprises a regular expression element.

21. (Currently amended) The method of claim 19 further comprising programming instructions for performing the step of selecting, in response to a security policy associated with a wildcarded resource identifier from said matching step, one of a grant of access to a requested resource corresponding to said resource identifier and a denial of access to said requested resource.

22. (Currently amended) The program product of claim 19 wherein said list of said wildcarded resource identifiers comprises an ordered list of ~~wildcarded~~ wildcarded resource identifiers, said ordered list being ordered in accordance with said predetermined set of precedence values.

23. (Currently amended) The program product of claim 22 wherein said program of instructions for performing the step of matching said resource identifier received in said access request comprises a program of instructions for performing the steps of:

sequentially comparing said resource identifier received in said access request with each wildcarded resource identifier in said ordered list; and
in response to a comparison, terminating said comparing step, and returning a policy associated with a wildcarded resource identifier from said comparing step.

24. (Currently amended) The program product of claim 22 further comprising programming instructions for performing the step of ordering ~~a list of wildcarded resource identifiers to generate~~ said ordered list of ~~ordered~~ wildcarded resource identifiers.

25. (Currently amended) The program product of claim 24 wherein said programming instructions for performing the step of ordering ~~[[a]]~~ said ordered list of wildcarded resource identifiers includes programming instructions for performing the steps of:

selecting a pair of wildcarded resource identifiers from a list in accordance with a predetermined sorting process;

sequentially selecting elements in each identifier of said pair of wildcarded resource identifiers;

comparing a first precedence value corresponding to a first one of a selected element of said pair of wildcarded resource identifiers and a second precedence value corresponding to a second one of a selected element of said pair of wildcarded resource identifiers, wherein said first precedence value and said second precedence value each comprise a predetermined value from said predetermined set of precedence values; and

if said first precedence value and said second precedence value ~~corresponding~~ are not equal, ordering said pair of wildcarded resource identifiers according to said first precedence value and said second precedence.

26. (Currently amended) The program product of claim 25 further comprising programming instructions for performing the step of returning said pair of wildcarded resource identifiers from said ordering step to said ~~preselected~~ predetermined sorting process.

27. (Currently amended) The program product of claim 19 wherein said predetermined set of precedence values comprises:

a first precedence value having a highest precedence corresponding to an exact character, a second precedence value have a next lower precedence from said first precedence value, corresponding to a character range;

a third precedence value, having a next lower precedence from said second precedence value, corresponding to any character;

a fourth precedence value, having a next lower precedence from said third precedence value, corresponding to a repeating exact character;

a fifth precedence value, having a next lower precedence from said fourth precedence value, corresponding to a repeating character range; and

a sixth precedence value, having a next lower precedence from said fifth precedence value, corresponding to any character string, and wherein said sixth precedence value comprises a lowest precedence value.

28. (Currently amended) A security policy method comprising the steps of:
associating wildcarded resource identifiers with a corresponding security policy;
[[and]]

matching a resource identifier received in an access request to one of a list of said wildcarded resource identifiers, wherein said matching is determined in accordance with a predetermined set of precedence values, each precedence value of said predetermined set of precedence values corresponding to a predetermined wildcard element, wherein each predetermined wildcard element comprises a regular expression element; and

selecting, in response to a security policy associated with a wildcarded resource identifier from said matching step, one of a grant of access to a requested resource corresponding to said resource identifier and a denial of access to said requested resource, and wherein said list of said wildcarded resource identifiers comprises an ordered list of ~~wildcarded~~ wildcarded resource identifiers, said ordered list being ordered in accordance with said predetermined set of precedence values.